

3-Inch Ordnance Rifle

The 3-Inch Ordnance Rifle was also known as the ordnance rifle, the ordnance gun, the Griffen gun, and was sometimes erroneously referred to as the Rodman rifle (Goode, 1990). The gun was invented by John Griffen of New York. Griffen developed a process whereby strips of wrought iron ¾ inches thick and 4½ inches wide were wrapped around an iron core by a lathe. The tube was then heated and rolled to a length of seven feet before trunnions were welded on. Finally, the bore was reamed out. This process made the 3-Inch Ordnance Rifle the lightest gun in field artillery service during the Civil War. Despite its light weight, the process of wrapping the wrought iron bands around the core made it the strongest, most durable gun in the field. The gun was deployed in support of infantry to repulse enemy assaults, often positioned behind the lines and fired over the heads of friendly troops. Range made the piece excellent for long-range shelling. It was most effective in open spaces. Its use was limited by wooded areas, such as existed at Monroe's Crossroads. Typical rifling was lands .5 inch and grooves .84 inch.

Specifications:

bore diameter	3 inches
tube composition	wrought iron
length	73 inches
length of tube	69 inches
weight of tube	816 pounds
weight of projectile	9.5 pounds
powder charge	1 pound
range, 5 degrees elevation	1,830 yards
muzzle velocity	1,215 feet per second
shell type	Hotchkiss

well beyond the traditional 100-yard firing range of the old smoothbore musket.

By the last years of the war, tactics had adapted to the effectiveness of modern rifled arms. Infantry tactics were modified to open order skirmish lines, with available cover used whenever possible. Defensive positions were usually fortified with extensive entrenchments. Even short-term camps were usually protected by prepared rifle pits, picket posts, and videttes.

Although used extensively throughout the war, artillery, by 1863, became a defensive weapon rather than the offensive weapon it had been in 1861. Artillery was required to move behind the line of defense to be effective due to the increased range of the rifled-musket. Artillery tactics of the Civil War depended upon direct fire. Indirect fire would not be developed for another 40 years. The direct fire concept relegated the artillery to a defensive role

throughout the Civil War and for many years after.

Of the three combat branches, cavalry made the greatest adaptation. In battle, cavalry moved from the close-order charge meant to break or out-flank a line to a mobile unit that could move quickly to the scene of action, then dismount and fight as light infantry. With the advent of breech loading single-shot and repeating carbines, cavalry firepower increased dramatically. This increased firepower and mobility allowed the cavalry to regain a usefulness on the battlefield it had lost with the introduction of the rifled-musket. Cavalry was also used extensively throughout the war as a fast and efficient scouting and intelligence gathering arm. Its mobility allowed units to range far and wide around the main army to protect the marching columns and scout the opponents' movements. Kilpatrick's Division was involved in this type of protection screen and scouting endeavor when he halted to camp at Monroe's Crossroads on the night of 9 March 1865. *Lieutenant General Hampton's* Confederate Cavalry force was providing a mobile rear-guard function for the retiring Confederate Army of *General Joseph E. Johnston, C.S.A.* *Lieutenant General Hampton's* Cavalry also scouted and provided intelligence on Union movements and at Monroe's Crossroads took the opportunity to raid a sleeping, unprepared Union camp with the intention of delaying their movement toward Fayetteville.

THE BATTLE STAFF RIDE EXERCISE

The goal of the staff ride exercise¹² at Monroe's Crossroads is to assess the action based on an analysis of the historical narrative and on-site observation against the principles of war as outlined in FM 100-5 (*Operations*). The principles of war were not set down in a training regulation until 1921. However, many of these concepts were developed during the Civil War. Most senior Union and Confederate commanders were graduates of the United States Military Academy at West Point, New York. They were well versed in the art of war, as then practiced.

Technological innovations, such as the rifled-musket, required changes in tactics to meet the new situations. Dogmatic commanders tended to be replaced by those able to adapt to field conditions during the latter years of the war. Those present at Monroe's Crossroads had learned their lessons well,

but tired, saddle-weary, rain-soaked, combat-hardened veterans did make mistakes during the battle. These mistakes were paid for by their soldiers. The lessons of Monroe's Crossroads, relative to the principles of war, require a careful assessment of the movements of the commands, deployment of troops, offensive action, defensive action, unit cohesion, and unit disintegration.

THE TENETS OF ARMY OPERATIONS (FM 100-5)

Whenever Army forces are called to fight, they fight to win. Army forces in combat seek to impose their will on the enemy. Victory is the objective, no matter what the mission. Nothing short of victory is acceptable. The fundamental tenets of Army operations doctrine describe the characteristics of successful operations. In and of themselves they do not guarantee victory, but their absence makes winning difficult and costly to achieve.

The tenets are:

Initiative:

The ability to set or to change the terms of battle. In the attack, initiative implies never allowing the enemy to recover from the initial shock of the attack. In the defense, initiative implies quickly turning the tables on the attacker. In battle, initiative requires the decentralization of decision authority to the lowest practical level.

Agility:

The ability of friendly forces to react faster than the enemy. A mental and physical quality, it is a prerequisite for seizing and holding the initiative. The accumulation of chance errors, unexpected difficulties, and confusion of battle creates friction that impedes both sides.

Depth:

The extension of operations in time, space, resources, and purpose. Operations are conducted throughout the depth of the battlefield with the aim of defeating the enemy more rapidly by denying freedom of action and disrupting or destroying the coherence and tempo of its operations.

Synchronization:

The ability to focus resources and activities in

time and space to provide maximum relative combat power at the decisive point.

Versatility:

The ability of units to meet diverse challenges, shift focus, tailor forces, and move from one role or mission to another rapidly and efficiently.

THE DYNAMICS OF COMBAT POWER (FM 100-5)

Four primary elements combine to create combat power — the ability to fight.

The elements are:

Maneuver:

The movement of combat forces to gain positional advantage, usually in order to deliver either direct or indirect fire upon the enemy. Maneuver is the means of positioning forces at decisive points to achieve surprise, psychological shock, physical momentum, massed effects, and moral dominance.

Firepower:

The destructive force essential to defeating the enemy's ability and will to fight. It is the amount of fire that may be delivered by a position, unit, or weapon system.

Protection:

Conserving the fighting potential of a force so that commanders can apply it at the decisive time and place. Protection has four components: operational security, conservation of soldiers' health, morale, and equipment readiness, safety, and avoidance of fratricide.

Leadership:

The most essential dynamic of combat power is competent and confident leadership of officers and noncommissioned officers.

THE PRINCIPLES OF WAR (FM 100-5)

Objective:

Direct every military operation toward a clearly defined, decisive, attainable objective. The ultimate military purpose of war is the destruction of the enemy armed forces and the enemy's will to fight.

Offensive:

Seize, retain, and exploit the initiative. Offensive action is the most effective and decisive way to attain a clearly defined common objective. Offensive operations are the means by which a military force seizes and holds the initiative while maintaining freedom of action and achieving decisive results.

Mass:

Mass the effects of overwhelming combat power at the decisive place and time. To mass is to hit the enemy with a closed fist, not poke at him with the fingers of an open hand. Mass seeks to smash the enemy, not sting him.

Economy of Force:

Economy of force is the judicious employment and distribution of forces. No part of the force should ever be left without purpose.

Maneuver:

Place the enemy in a position of disadvantage through flexible application of combat power.

Unity of Command:

For every objective, seek unity of command and unity of effort. Unity of command means that all forces are under one responsible commander.

Security:

Never permit the enemy to acquire unexpected advantage. Security enhances freedom of action by reducing vulnerability to hostile acts, influence, or surprise. Security results from the measures taken by a commander to protect his forces.

Surprise:

Strike the enemy at a time or place or in a manner for which he is unprepared. Surprise can decisively shift the balance of combat power.

Simplicity:

Prepare clear, uncomplicated plans and concise orders to ensure thorough understanding. Everything in war is very simple, but the simple thing is difficult.

STAFF RIDE PURPOSES AND OBJECTIVES¹³

The staff ride is a versatile educational tool. In a

general sense, its sole purpose is to further the professional development of U.S. Army leaders. Specifically, it may be designed to achieve one or more objectives, depending upon the needs of the students and the circumstances under which the staff ride is conducted. Some of these specific objectives are:

- To expose students to the dynamics of battle, especially those factors which interact to produce victory and defeat;
- To expose students to the “face of battle”, the timeless human dimensions of warfare;
- To provide case studies in the application of the principles of war;
- To provide case studies in the operational art;
- To provide case studies in combined arms operations or in the operations of a single arm or branch;
- To provide case studies in the relationship between technology and doctrine;
- To provide case studies in leadership at any level desired;
- To provide case studies in unit cohesion;
- To provide case studies in how logistical considerations affect operations;
- To show the effects of terrain upon plans and their implementation;
- To provide an analytical framework for the systematic study of campaigns and battles;
- To encourage officers and NCOs to study their profession through the use of military history;
- To kindle or reinforce an interest in the heritage of the U.S. Army.

A carefully designed and implemented staff ride can attain simultaneously all of these objectives and more.

CONDUCTING A STAFF RIDE**The Instructor Team**

The Instructor Team members are the central figures in the design and conduct of a successful staff ride. Although National Park Service rangers, licensed guides, and local historians may assist materially, they cannot be expected either to understand the particular educational focus of the exercise or to design a program with the U.S. Army’s needs in mind.

Instructor Team Requirements

- Be thoroughly conversant with sources, both primary and secondary;
- Understand the operational, organizational, doctrinal, and technological context in which the battle took place;
- Be conversant with biographical information on commanders and key individuals;
- Know the order of battle, unit strengths, and weapon capabilities;
- Be thoroughly conversant concerning movements and operations and be able to distinguish those events chronologically;
- Be able to analyze the battle and determine factors significant to the historical outcome;
- Know the ground;
- Be able to interpret the events of the battle in terms of current U.S. Army doctrine and assist students in deriving usable lessons from the comparison;
- Work to refine and improve the staff ride by developing new sources, new field study routes, more effective training aids, and greater subject-matter expertise;
- Ensure a range request, Fort Bragg Form 1528, is submitted to Range Control six weeks prior to the field study phase. The battlefield is located in Training Area Z1.

STAFF RIDE PHASES

Phase I — Preliminary Study

If the student has not been well prepared about the purpose of the exercise, the organizational and operational setting of the battle, and the significant events of the action, and if the student has not become intellectually involved in the process of study, then the exercise becomes more of a historical battlefield tour. The preliminary study phase is critical to the success of the field study phase.

The preliminary study phase may take various forms, depending on time available and student needs. The possible forms include formal classroom instruction, individual study or a combination of both.

The optimum preliminary study phase combines lecture, individual study, and group discussion. To get students more actively involved, instructors may assign specific subjects to be researched by small groups or individuals. These mini-experts are then

available to brief, answer questions, and provide input during the field study phase. This is an excellent technique for ensuring student participation and group discussion. Various factors will affect subject assignments. However, appropriate subjects could include key personalities, specific units, critical events or a battlefield operating system.

In any form, the preliminary study phase must accomplish the following:

First: Ensure the students clearly understand the purpose and objectives of the exercise;

Second: Ensure the students become actively involved;

Third: Provide the basic knowledge to a general understanding of the battle to include:

- Order of battle, strength, and doctrine of the opposing forces;
- Biographical information on significant individuals;
- The tactical situation and mission of the opposing forces;
- Equipment and weapons' characteristics;
- Terrain and weather considerations;
- General outline and chronology of significant events;
- Bibliography or read-ahead packet;
- Map.

Students must develop an intellectual perception of the battle that will be either reinforced or modified during the field study phase.

Phase II — Field Study

The field study phase readily distinguishes the staff ride from other forms of systematic historical study. It culminates all previous efforts by instructors and students to understand selected historical events, to analyze the significance of those events, and to derive relevant lessons for professional development.

If the preliminary study phase has been systematic and thorough, the field phase reinforces ideas already generated. The field study phase is the most effective way to stimulate the students' intellectual involvement and ensure any conclusions reached during the staff ride process are retained.

Design

- The field study phase should be designed to visit all significant sites associated with the battle. If only a portion of the field can be visited, the

instructor must summarize what occurred elsewhere.

- The route should be designed to visit sites in chronological order. Avoid backtracking.
- Plan stops or stands along the way for historical significance, visual impact, vignette suitability, or logistical necessity.
- The route schedule should be flexible, allowing for unplanned stops to address issues raised by the students.
- Ease of access should be considered during route selection. However, this should not override other considerations such as chronological development and site significance.
- The instructor team should traverse the route to discover timing or other problems that might interfere with successful completion of the field study phase.

Conduct

- The instructor team should make every effort to maintain intense student involvement by removing distractions and keeping attention focused on the exercise.
- The instructor team must ensure that students are correctly oriented both chronologically and spatially. A partial solution is to have all students carry compasses and maps, along with their documentary material.
- A simple technique to enhance both involvement and orientation is the use of first-person accounts or vignettes at specific stops on the route. These personal accounts are essential to battle analysis because they provide important information on the attitudes, perspectives, and mental state of the participants, the vital human dimension of battle.
- Training aids can orient students, clarify complex maneuvers, and create immediacy. Such aids may include situation maps, overlays, sand tables, and diagrams.
- The size of the student party and the instructor to student ratio will help determine the quality of the field study phase. In most cases, 35 to 40 students are the most a single instructor can lead and still retain any degree of personal interchange. A much more effective ratio is one instructor for every 15 to 20 students.

Phase III — The Integration Phase

No matter how detailed the preliminary study or

how carefully crafted the field study, a truly successful staff ride requires a third and final phase. This integration phase is a formal or informal opportunity for the students to reflect on their experience.

Several positive effects stem from the integration phase. First, it requires students to analyze the previous phases and integrate what they learned in each into a coherent overall view. Second, it provides a mechanism through which students may organize and articulate their impressions of both the battle and the lessons they derived from its study. Third, students may gain additional insights from sharing these impressions with their peers. Finally, the instructor team may use the integration phase to solicit student comments on its performance and suggestions for improvement.

The integration phase may be conducted on the battlefield immediately following the field study phase or back in your unit area. However, the integration phase is most successful when it follows field study as closely as circumstances permit.

An instructor should moderate discussion. He should allot enough time for all who wish to speak and for a complete discussion of any issues raised.

Sources of Information

Primary sources are documents produced by participants or eyewitnesses. Included among primary sources are official documents such as after-action reports, orders, messages, strength reports, unit journals, letters, maps, diaries, and reminiscences.

Secondary sources are accounts of events produced by nonparticipants. Secondary sources are most often narrative in form and analytical in nature. Valuable as they are, secondary sources should not be the sole materials furnished to staff ride students.

Secondary Benefits

Although professional military education is sufficient reason for devoting time and resources to a staff ride, certain secondary benefits may accrue as well. These benefits spring from the fact that, for many participants, a visit to a battlefield is an emotional experience that may reinforce their feelings for their profession, their units, and one another. If participants belong to the same unit, their shared experiences during the exercise may strengthen the camaraderie and *esprit* so necessary

for unit cohesion. If promotions or individual achievement awards are due to be conferred at the time of the staff ride, there can be no better setting for the ceremony than a site hallowed by earlier deeds of sacrifice and valor.

CONCLUDING REMARKS

The design and conduct of a staff ride is not a simple task. A staff ride requires subject matter expertise, intelligently applied in a systematic way, to guide professional soldiers through the most complex of intellectual exercises — the analysis of battle in all its dimensions.

If a terrain exercise is all that is required, a

Tactical Exercise Without Troops (TEWT) can be constructed on any convenient piece of ground. Such terrain exercises are useful, but they are not a staff ride. If soldiers are to be taken to a battlefield of the past but there is little or no time for preliminary study, a historical battlefield tour is all that is required. Such tours also have their place, but they are not staff rides.

A staff ride yields far broader results than a TEWT or a battlefield tour, but is more difficult to devise. Those who want to conduct a staff ride must be aware of these difficulties. Carefully designed and intelligently executed, a staff ride is one of the most powerful instruments available for the professional development of the U.S. Army’s leaders.



[Go back to Table of Contents](#)

[Go to next page](#)